

Mean Relative Humidity by Months for Colfax.

	Per ct.
January	60.4
February	67.8
March	61.1
April	51.8
May	58.1
June	32.3
July	28.4
August	24.9
September	30.9
October	34.4
November	57.4
December	69.5
Average	47.7

Rainfall during year, 44.425 inches.—Average, 47.062

From records in possession of Mr. Morris Lobner, S. P. Co.'s agent at Colfax.

Mean Temperature of Colfax, Taken at 2 p. m., for Months and Years.

Month.	1870	1871	1872	1873	1874	1875	1876	Avr.
Jan. ..	55.6	54.0	57.9	49.9	51.9		47.1	52.7
Feb. ..	52.2	50.7	53.0	48.8	49.6	57.5	53.9	51.9
Mar. ..	52.3	56.5	58.4	63.6	48.6	56.5	54.3	55.7
Apr. ..	64.1	66.6	59.6	64.1	62.6	68.6	62.6	64.0
May ..	70.2	69.9	76.6	74.1	70.9	74.8	71.5	72.6
June ..	79.8	86.2	81.6	83.6	79.7	79.8	87.5	82.6
July ..	89.3	90.0	89.7	91.2	90.3	91.1	86.0	89.7
Aug. ..	87.1	94.9	92.1	89.7	85.3	89.5	85.9	89.2
Sept. ..	79.4	85.0	82.4	85.7	84.0	84.9	79.5	82.9
Oct. ..	71.5	76.5	75.9	75.1	67.5	82.6	67.9	73.9

Nov. .. 61.5 | 58.2 | 60.8 | 66.5 | 56.2 | 55.7 | 59.8

Dec. .. 52.4 | 55.0 | 56.6 | 46.9 | 55.6 | 57.0 | 53.9

Average daily temp. at 2 p. m. for 7 years, 69.1.

Highest temp. in 7 years, 107.5—July, (2 p. m.)

Lowest temp. in 7 years, 32—Dec. (2 p. m.)

Number of times temp. reached 100 or over—26 times or 3.7 each year.

(From records in possession of Mr. M. Lobner, Colfax.)

Month	1870	1871	1872	1873	1874	1875	1876	Total	Average
Jan.	11.646	14.670	20.520	2.870	10.630	12.320	8.870	81.528	11.646
Feb.	8.450	4.305	13.680	9.620	5.720	0.190	6.800	47.605	6.801
Mar.	5.410	4.305	4.690	1.240	8.920	3.020	12.090	39.685	5.669
Apr.	5.100	4.090	3.400	1.810	3.430	0.000	3.230	21.000	3.000
May	2.650	2.835	0.610	2.030	1.310	1.220	1.020	9.305	0.364
June	0.020	0.130	0.400	0.000	0.000	0.000	0.000	0.460	0.066
July	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
Aug.	0.010	0.000	0.010	0.000	0.000	0.000	0.000	0.020	0.003
Sept.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oct.	1.210	0.620	0.520	0.580	3.360	0.350	1.207	7.980	1.140
Nov.	3.790	4.870	3.990	2.270	13.790	14.840	7.258	50.808	8.447
Dec.	7.435	9.800	10.460	15.640	1.120	7.100	8.592	60.147	7.258
Average	43.321	44.425	58.280	36.070	48.280	41.550	57.507	329.433	47.062

(From records in possession of Mr. Morris Lobner, S. P. Co.'s Agent at Colfax.)

Discussion.

Dr. Keys: There have been two points of which I want to speak, and one is the matter of not sending a patient to a resort with the idea of having him rough it, and the other thing is the matter of absolute rest for these tuberculous patients. I have just received a letter from a patient, unfortunately taken with tuberculosis, now in Switzerland, and he writes

that the patients there are put to bed after a thorough examination, and are told that their clothing is locked up and that they will not be allowed to see it until their temperatures are within one-half a degree of normal. The main features of the treatment are food in plenty, an absolute out-of-doors life although in bed, and absolute rest. These things are essential to the tuberculous patient.

Dr. Peers, closing: In conclusion, I will cite one case, showing how some patients are wrongly sent to health resorts. A young fellow last fall came to my office with an advanced tuberculosis. He said that he had been sent from Pennsylvania, that he had no money except a few dollars, and that he had been sent away from Pennsylvania, where he could have been lodged in a free sanatorium and have been kept by the state, and where he could have recovered his health. He lived in my neighborhood a few weeks, when I told him that he would do just as well with his sister, where he could go to bed and have some attention. If this had been done in the first place it might have been sufficient. It shows you how some people place a blind reliance on climate and location, where really the change with the idea of roughing it and working their way, really means their death.

WAXED SILK AS A SUTURE.*

By C. E. THOMPSON, M. D., Dunsmuir.

I wish very briefly to present for your consideration a method of preparing silk which in my hands has proven highly satisfactory.

The value of waxed silk for suture purposes, was first brought to my attention about ten years ago by a brief statement in a medical journal, so I do not claim originality in this method; but as I have not found any other surgeon using such sutures as a routine nor have I heard the subject brought up in a society, I thought a few remarks regarding it might prove of interest and bring to your attention a very useful preparation in suture work.

The technic of waxing the silk is not of very great importance so long as the silk is perfectly sterile and is thoroughly saturated with sterile wax, the melting point of which is considerably above the temperature of the body.

My usual procedure is to drop the card of silk into boiling water to sterilize both the silk and card; they are then taken out, lightly dried on a towel and then dropped into a boiling mixture of equal parts of white wax and paraffin, containing one per cent each of carbolic acid and salicylic acid. I do not know that the acids are combined in the best proportions or that they are of any great importance in the wax but theoretically they ought to inhibit the development of any germs that might be in the silk or wax or in the tissues with which they are in contact.

In a perfectly sterile field of operation the wax alone might be less irritating, but in very few cases do we find ideal conditions and I have always added the acids on this account.

After boiling a few moments all the moisture contained in the silk and card are driven off and replaced by the wax, the card is then removed and, when cold, is placed in an envelope where it remains until wanted.

* Read before the Pacific Association of Railway Surgeons.

I have preferred to use the prepared silk on glass spools and kept in alcohol. The latter is poured off, and after the spools have thoroughly boiled in the wax they are replaced in the bottle as before except that they are kept dry; in this way it is more convenient to handle and less liable to contamination.

I have experimented with different proportions of wax and paraffin and think when combined in about equal parts the best result is obtained. If too much paraffin is used the thread fibre does not cohere sufficiently to prevent capillary attraction, and the thread is not so pliable nor does the first knot seem to hold so well in tying. If too great a proportion of wax is used the thread fiber retains too much wax and the thread is apparently made larger and troublesome in drawing through the eye of the needle; I think also that the wax alone is more liable to be affected either by chemical or physiological processes, than when it is combined with paraffin in considerable proportion.

The temperature of the mixture when boiling is about 350 degrees and I think it is safe to assume that any germ or spore that might escape such a temperature would be too weak to burrow out of the wax and paraffin after they had been incorporated with the thread fiber.

I use the twisted thread in preference to braided, for when dipped in hot water before threading a needle, and by rolling it between the finger and thumb the thread is made quite small and can be twisted to a fine point; it is then very easily threaded into a much finer needle than could otherwise be used; this advantage alone is worth the trouble of waxing to the general practitioner, who has to do much emergency work and is called upon to use sutures under all kinds of unfavorable surroundings; the fine needle rendering the operation decidedly less difficult to perform besides being less painful and making smaller stitch holes, all of which are deserving of consideration by the surgeon and appreciated by the patient.

Prepared in this way I believe silk to be superior to any other material we possess where a non-absorbable suture can be used. When they are buried I believe they are less likely to cause trouble than plain silk or poorly prepared catgut, and in the cases where I have so used them there has been no after trouble. It has most all of the advantages of silver wire, horsehair and silkworm gut with none of their disadvantages.

Waxed silk is especially valuable for use in closing wounds about the face and hands; it is often impossible entirely to prevent infection in such injuries and I have frequently removed the sutures from an infected wound and found the stitch holes not infected while the wound is bathed with pus, seeming to prove both the absence of capillarity and an inhibitory influence on germ development.

Another advantage over plain silk is that blood, pus, secretions or dressings do not easily adhere to the waxed thread and so you are not liable to tear out your sutures when you take off the dressings.

To sum up then, the advantages claimed for waxed silk are:

Its sterility and the ease of keeping it sterile.

The absence of capillary attraction.

It does not irritate the tissues.

Does not adhere to the tissues, dressings or secretions.

It is easily removed.

Easily prepared.

Convenient to carry, easy to thread and in tying it the knot does not slip so easily as plain silk.

Discussion.

Dr. Teass: This proposition of suturing to me has become a very simple matter. I can remember a few years back in doing surgery when I carried a grip around with me with every material necessary in it. As my experience progressed this has become much more simplified and to-day is a very simple matter. I simply take a few tubes of sterile catgut of various sizes and silkworm gut. I put them in a wide-mouthed bottle and fill it with tincture of iodine. I take it out and place it in hot lysol. The proposition of sterilizing silk is something I never attempt. I do not use the silk gut at all even as a buried suture. I have resorted altogether to catgut within the past few years. I can remember when I first attempted suturing with silk I had many cases of stitch hole abscesses but within the last few years I cannot recall a single case of stitch hole abscess even in those cases where there had been no previous preparation at all and I have had many scalp wounds and dirty wounds which are hurriedly cleaned out and a suture put in with very clean results.

SIMPLIFICATION OF THE TECHNIC OF THE SERUM DIAGNOSIS OF SYPHILIS.

By J. N. FORCE, M. D., Berkeley.

In the article which he has devoted in this journal to the technic of the different procedures employed for the serum diagnosis of syphilis, M. Fornet concludes that (the execution of the method of Wassermann presenting some difficulties), he desired that the examinations be practiced with all the guarantees of exactness by State laboratories, which would centralize them, and would put their results freely at the disposal of practitioners. It cannot be denied that the method of Wassermann is neither easy to learn or to apply, and its author himself declared, recently, before the Medical Society of Berlin that its technic was complicated. For these reasons, since the publication of the work of Wassermann, I have sought for, and finally found a method simpler and more rational. I explained its general principles some months ago, and its practical value has now been verified by numerous applications made by me and other workers. It is the technic of this method that I am going to explain for the first time, with all the necessary details, so that, simplified, as I have made it, the serum diagnosis of syphilis can now be carried out without any difficulty by all physicians desirous of using the latest gifts of science.

In order to practice serum diagnosis of syphilis, one needs fresh guinea pig serum, a five per cent suspension of sheep corpuscles, normal human serum, extract of an organ, and serum of the patient.

Fresh guinea pig serum. It is obtained by bleeding from the carotid or femoral. If only a small quantity is needed it can be taken from the heart with a small exploring needle, without killing the animal. Detach the clot which forms in the vessel and draw off the serum with a pipette. This serum

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